

Work Order ID 132218

132218

Page 1

Monday, May 04, 2015 8:02:21 AM

Item ID: D350-602-013 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Heli-Utility-Pod™ LH
 Start Date: 7/17/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/17/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: CL Date: MAR 04 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2202	G								
D2694	I								
DSI 9515	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP	D350-602-013	CHG002						
140	Small Fab	0.00							
140	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1-Assemble as per Dwg D2694								
	2-Install label D2258-160 on Pod Assembly as per Dwg D2694 at location of max pod load label on pg2 of dwg								

MCS 1605-24



DAC
28
9-88

16/5/07

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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MAY 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 132218

Monday, May 04, 2015 8:02:21 AM

132218

Page 3

Item ID: D350-602-013

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/17/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180		0.00							
180	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-602-013								
	Location: _____								
	PPP Rev: _____ BK004								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

SAS
27
9-89**MAY 30 2016****ML5****MAY 30 2016****ML5****MAY 30 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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132218

D350-602-013

Required Date: 7/17/2015

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-05-01 JLM IPP Rev:B Added D3495-1 06-05-17
JLM IPP RevC: add route seq DD 10.01.07 verified
by:EC IPP REV:D AS PER ECN 10-558 JLM 10-04-27
VERIFIED BY:DD
IPP Rev:C 09-02-03 update dwg rev's DD verified by:EC IPP Rev:D
add D2202-1 and D2202-5 DD 10.04.07 verified:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2324		Manufactured	No				Each	24.0000		1			
												DAS 6 9-89	DAS 28 9-89
D2324													
Strut Assy													
DAS 27 9-89 Location ST367 120341 ST370a 130989 Loc Qty 8 8 16 16 Loc Code													
MAY 26 2010													
D3322-041		Manufactured	No				Each	0.0000		1			
												DAS 28 9-89	
D3322-041													
Pod Assembly													
D4091-1		Manufactured	No				Each	1.0000		4			
												DAS 28 9-89	
D4091-1													
Mounting Lug													
DAS 27 9-89 Location ST522 128425 Loc Qty 1 1 Loc Code													
DAS 6 9-89													

MAY 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 132218

132218

Parent Item: D350-602-013

D350-602-013

Parent Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015

Required Date: 7/17/2015

Start Qty: 1.00

Required Qty: 1.00

D3910-3 Manufactured No

Each 83.0000

D3910-3

X-Tube Lug

**

140550
DAS 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST524	8	
110324	8	
ST525A	75	
117781	75	

D2258-160 Manufactured No

Each 6.0000

D2258-160

Placard

**

139695
DAS 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST005	6	
110345	6	

D2523 Manufactured No

Each 4.0000

D2523

Mounting Bracket

**

2
133952
DAS 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST445	4	
113708	4	

D2524 Manufactured No

Each 4.0000

D2524

Bracket Clamping

**

2
B133999
DAS 28 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST481	4	
128952	4	

128952

MAY 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																						OTHER :																																									

Picklist Print

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Work Order ID: 132218

132218

Parent Item: D350-602-013

D350-602-013

Parent Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015

Required Date: 7/17/2015

Start Qty: 1.00

Required Qty: 1.00

D3495-1 Manufactured No

Each 11.0000

D3495-1

Placard

**

DAS 6 28
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST042

11

129989

11

f

14.0000

**

DAS 6 28
9-89 9-89

D3984 Manufactured No

D3984

Rubber Extrusion, X-Tube, Per Foot

DAS
27
9-89

Location

Loc Qty

Loc Code

ST413

14

115196

14

CUT 8 AT 3.00"

AN3-7A

Purchased No

Each

184.0000

**

DAS 6 28
9-89 9-89

AN3-7A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

ST349

184

131420

177

M129706

7

AN3-15A

Purchased No

Each

18.0000

**

DAS 6 28
9-89 9-89

AN3-15A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

10

114941

10

ST348

8

M128429

8

DAS 6 28
9-89 9-89
MAY 26 2016

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

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Work Order ID: 132218

132218

Parent Item: D350-602-013

D350-602-013

Parent Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015

Required Date: 7/17/2015

Start Qty: 1.00

Required Qty: 1.00

AN4-12A Purchased No

Each 233.0000

AN4-12A

Bolt

**

1
134180

DAS 6 28
9-89 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FG	10	
120423	10	
ST344	223	
M131803	1	
m131957	222	

AN4-14A Purchased No

Each 258.0000

AN4-14A

Bolt

**

16
134508

DAS 6 28
9-89 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FG	5	
122141	5	
ST325A	107	
131677	2	
M131153	5	
M132189	100	
ST344	146	
M130716	15	
M131803	131	

AN4-16A Purchased No

Each 82.0000

AN4-16A

Bolt

**

4
134702

DAS 6 28
9-89 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FG	5	
121541	5	
ST343	77	
M128813	4	
M132035	73	

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

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Work Order ID: 132218

132218

Parent Item: D350-602-013

D350-602-013

Parent Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015

Required Date: 7/17/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

Each

1,673.000

24

NAS1149D0363.J

Washer

**

134608

DAS
28
9-89
68-6
9
SWD

DAS
27
9-89

Location

Loc Qty

Loc Code

CA	569	
m130799	569	
FP001	2	
113288	2	
GA	292	
m128429	292	
ST269	810	
m126319	9	
m131618	801	

NAS1149D0463J

Purchased

No

Each

4,697.000

42

NAS1149D0463.J

WASHER

**

134634

DAS
28
9-89
68-6
9
SWD

DAS
27
9-89

Location

Loc Qty

Loc Code

GA	41	
M129390	41	
ST269	4656	
M129682	86	
M130799	371	
M132035	4199	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, May 04, 2015 8:02:21 AM

Page 6

Work Order ID: 132218

132218

Parent Item: D350-602-013

D350-602-013

Parent Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015

Required Date: 7/17/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042L3 : \ Purchased No

Each 2,157.000

MS21042L3

Nut

**

12

134634

DAS 6 28
9-89 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FP001	420	
M130922	420	
GA	602	
M131317	602	
ST305	1135	
116549	12	
126333	49	
M128754	2	
M131624	72	
st305	1000	

MS21042L4 : \ Purchased No

Each 2,461.000

MS21042L4

Locknut

**

21

134606

DAS 6 28
9-89 9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FP001	42	
m124231	42	
GA	224	
m127813	224	
ST260a	62	
m130799	56	
m131803	6	
ST305	2133	
m128300	8	
m130388	16	
m130922	97	
m131618	12	
m132123	2000	

MAY 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Qty	Part Number	Description
X	D2694	UTILITY POD ASSEMBLY
1	D2202-1	POD LID
1	D2202-3	POD BASE
5	D2204-9	LATCH
1	D2429-041	SPRING CLIP ASSEMBLY
1	D2461-1700	NEOPRENE SEAL
5	D2528-1	BACKER PLATE
4	D2528-3	BACKER PLATE
1	D2569	HINGE
1	D3007-041	PROP ASSEMBLY
19	AN4-5A	BOLT
1	AN4-6A	BOLT
2	AN526C632R7	SCREW
21	AN960JD416	WASHER
2	AN960JD6	WASHER
2	MS21042L06	NUT (OR MS21042-06)
20	MS21042L4	NUT (OR MS21042-4)
38	AD62ABS	RIVET

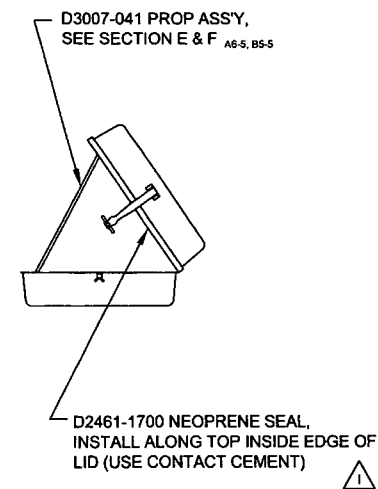
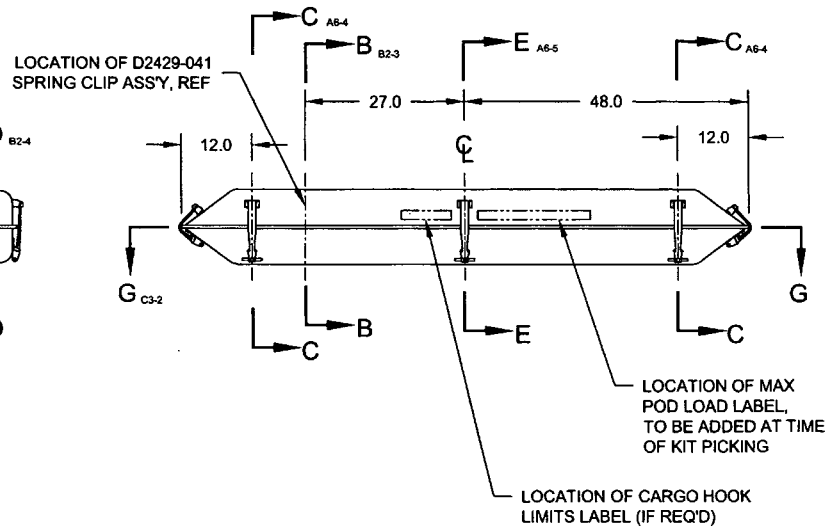
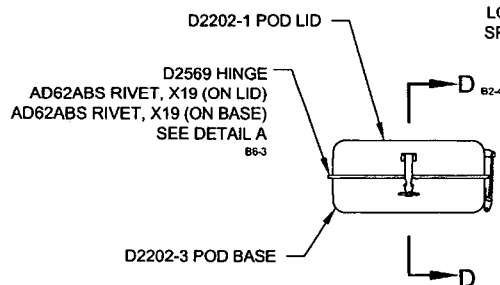
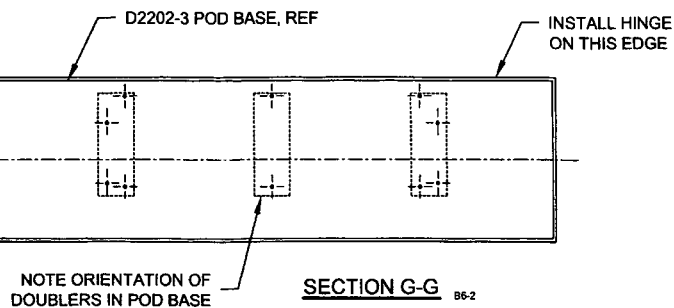
GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME AND PAINT PER QSI 005 4.2 TO MATCH ORIGINAL FINISH
AS REQ'D TO TOUCH UP FINISH AFTER DRILLING OR ASSEMBLY
INSIDE: DUPONT HIGHBUILD PRIMER GREY 1144-S
OR DUPONT 2K-URETHANE PRIMER GREY 7704-S
OUTSIDE: DUPONT IMRON POLYURETHANE ENAMEL BASE WHITE (555U)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 48.5 lbs
- 8) TRANSFER DRILL UNSPECIFIED HOLES FROM ATTACHING PART AS FOLLOWS: AN526C632 → DRILL Ø0.141
AN4 → DRILL Ø0.257
- 9) SEAL ALL HOLES AND EDGES OF POD WITH CYANOACRYLATE GLUE
- 10) FOR D2569 HINGE:
 - (i) INSTALL RIVET HEADS FROM OUTSIDE OF POD
 - (ii) GRIND TRAILING EDGE OF RIVET TO PERMIT HINGE TO CLOSE
 - (iii) ENSURE ALL RIVET HOLES ARE DRILLED ON THE LARGER HINGE TABS AS SHOWN IN DETAIL A

CL MAR 04 2015
W10. 132218

RELEASED
2010-04-29

I	REFORMAT, D2204-9 LOC SPEC'D (B2-4,B6-4,C2-4,C6-4,B6-5,C6-5), D2461-X WAS D2462-X (D5-1,B1-2), ADD FINISH (B5-1)	CP	10.04.20
H	CHANGED RIVETS FROM AD64ABS TO AD62ABS (PAR#185)	DC	07.07.18
G	REVERT BACK TO D2204-9 LATCH	CP	01.05.08
F	REDESIGN, CHANGE LATCHES & PROP	CP	01.03.20
E	CHANGE DIMENSIONS	RF	99.12.20
D	SEAL & HINGE CHANGE (TSR A1047 & A855/A858); INCLUDED DE09119	CP	99.01.08
C	ADD DOUBLER HOLES, REMOVE FINISH	KE	98.11.12
B	CHANGE RIVET PATTERN, ADD D2429	KE	97.10.08
A	NEW ISSUE CREATED TO REPLACE D350-602-041 AND -043	KE	97.07.02
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JP		
CHECKED		DRAWING NO.	REV. I
MFG. APPR.		D2694	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD ASSEMBLY	NTS
DATE	10.04.20	COPYRIGHT © 1997 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D2694 UTILITY POD ASSEMBLY

RELEASED
2010-06-29
MJP

DESIGN	JB	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV.
MFG. APPR.		D2694	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		UTILITY POD ASSEMBLY	NTS
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8 7 6 5 4 3 2 1

D

D

C

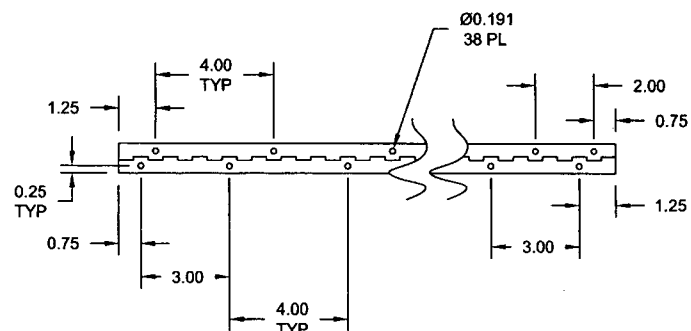
C

B

B

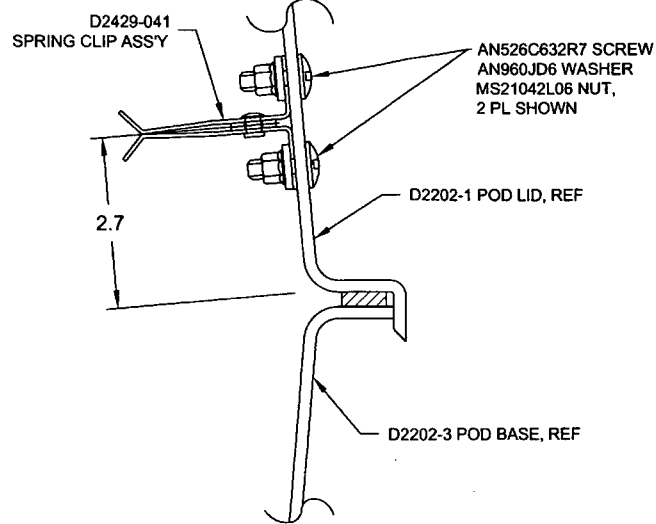
A

A



DETAIL A: HINGE
NOT TO SCALE

10
C7.2



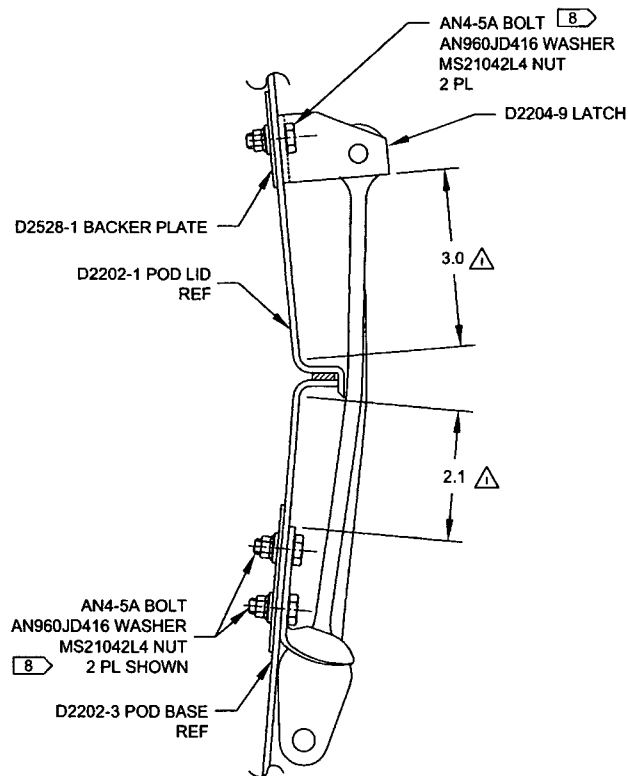
SECTION B-B
NOT TO SCALE

C5.2

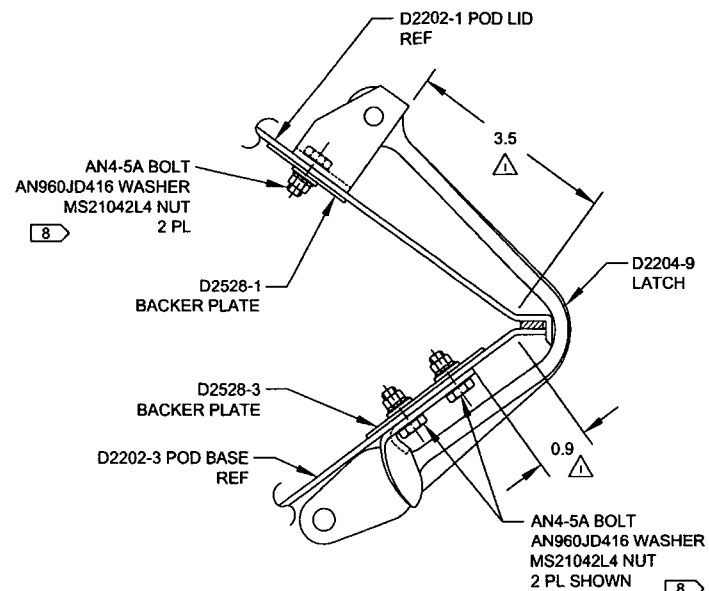
RELEASED
2010-04-29
MPO

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. 1
MFG. APPR.	<i>[Signature]</i>	D2694	SHEET 3 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	UTILITY POD ASSEMBLY	NTS
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8 7 6 5 4 3 2 1



SECTION C-C
SCALE 10X C3-2, C5-2



SECTION D-D
SCALE 10X C6-2

RELEASED
2010-04-29
MP

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	<i>JP</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JP</i>	DRAWING NO.	REV. 1
MFG. APPR.	<i>JP</i>	D2694	SHEET 4 OF 5
APPROVED	<i>MP</i>	TITLE	SCALE
DE APPR.	<i>MP</i>	UTILITY POD ASSEMBLY	NTS
DATE	10.04.20	COPYRIGHT © 1997 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

D

D2202-1 POD LID, REF
D2528-1 BACKER PLATE
D2012-107 CLEVIS, REF

AN4-6A BOLT
AN960JD416 WASHER, 2X
MS21042L4 NUT
1 PL, BOLT HEAD ON INSIDE
OF POD AS SHOWN

D3007-1 PROP ARM
REF

AN4-10A BOLT, REF
D2022-101 SPACER, 2X REF
AN960JD416 WASHER, REF
MS21042L4 NUT, REF

AN4-5A BOLT
AN960JD416 WASHER
MS21042L4 NUT
1 PL, BOLT HEAD ON OUTSIDE
OF POD, NOT SHOWN

3.0

D2705 SUPPORT BRACKET
REF

AN4-5A BOLT
AN960JD416 WASHER
MS21042L4 NUT
2 PL SHOWN

D2202-3 POD BASE
REF

2.1

F B2-5

D2204-9 LATCH

SECTION E-E C4-2
SCALE 10X

C

B

A

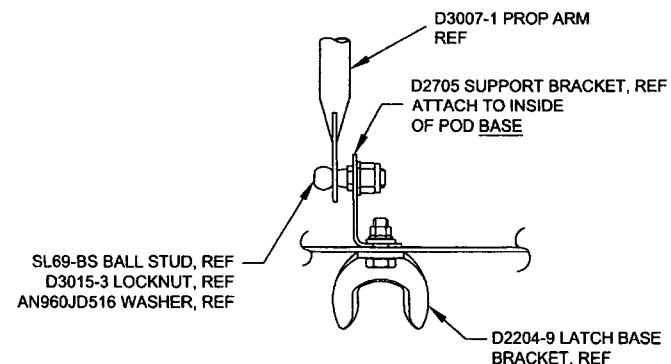
8 7 6 5 4 3 2 1

D

C

B

A



SECTION F-F B5-5
D3007-041 PROP ASS'Y DETAIL
SECTION ROTATED 85° CW

RELEASED
2010-04-29
MP

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	JP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	HA	DRAWING NO.	REV.
MFG. APPR.	MP	D2694	SHEET 5 OF 5
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	UTILITY POD ASSEMBLY	NTS
DATE	10.04.20	COPYRIGHT © 1997 BY DART AEROSPACE LTD	
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NOTES:

1) MATERIALS:

RESIN: EPOCAST 50-A/9816,
OR DERAKANE 470-36/411/510A40

FOAM: A500 CORE CELL,
OR DIVINYCELL,
OR AIREX,
0.38 THICK (3/8 FOAM)

FIBRE: 9.7 oz 7781 WEAVE "S" GLASS (9 oz SATIN)
5 oz PLAIN WEAVE KEVLAR (5 oz KEVLAR)

2) FINISH: INSIDE = PRIME PER DART QSI 005 4.2
OUTSIDE = WHITE GELCOAT #GEL 944W005

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

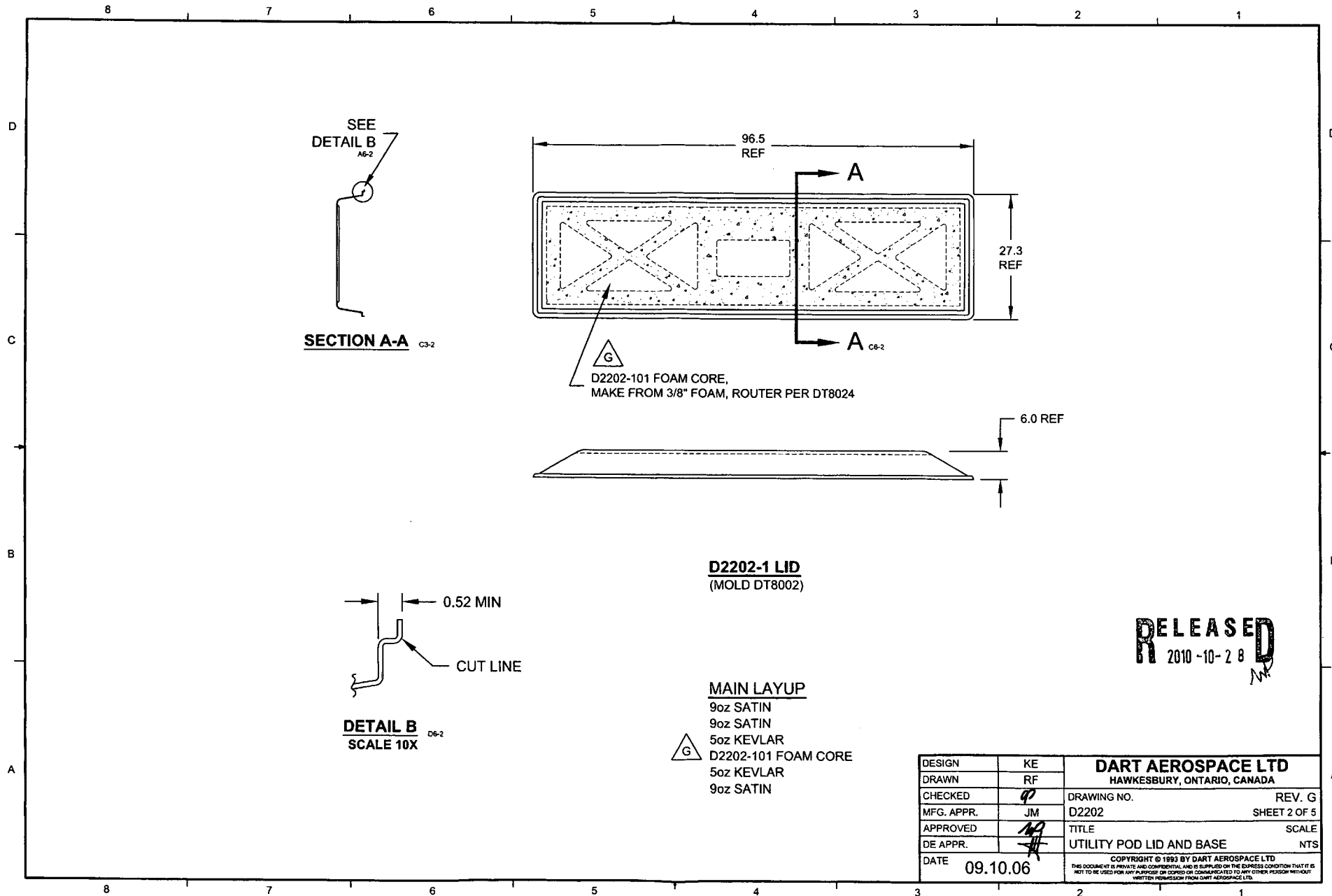
7) WEIGHT: N/A

8) LAMINATE PER DART QSI 006.
LAMINATION SCHEDULE PER THIS DRAWING.

9) PEEL PLY ALL SURFACES.

RELEASED
2010-10-28
MD

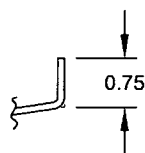
G	REFORMAT DRAWING TO CURRENT STANDARDS; D2202-101 WAS D2202-1 (ZN C5-2, A4-2); ADD 77.5 & 22.0 DIM. (ZN D4-3, C6-3); D2202-103 WAS D2202-5 (ZN C5-3, A4-3); ADD 2.00 MAX (ZN D3-4); INCORPORATED DEO 9217 & ADD D2202-5/-6 ON SHEET 5 PER PAR 09-034	RF	09.10.06
F	CHANGE LAYUP, DOUBLER, NOW DRILLED	CP	01.03.14
E	ADDED SECTIONS WITH LIP DIMS	KE	99.11.11
D	MOVED DOUBLERS, REMOVED HOLES	KE	98.11.09
C	REVISED DOUBLER/HOLES LOCATIONS	KE	97.07.04
B	ADD DOUBLERS AND HOLES	-	93.10.27
A	NEW ISSUE	-	93.10.27
REV.	DESCRIPTION	BY	DATE
DESIGN	KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	92	DRAWING NO.	REV. G
MFG. APPR.	JM	D2202	SHEET 1 OF 5
APPROVED	MD	TITLE	SCALE
DE APPR.	HA	UTILITY POD LID AND BASE	NTS
DATE	09.10.06	COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



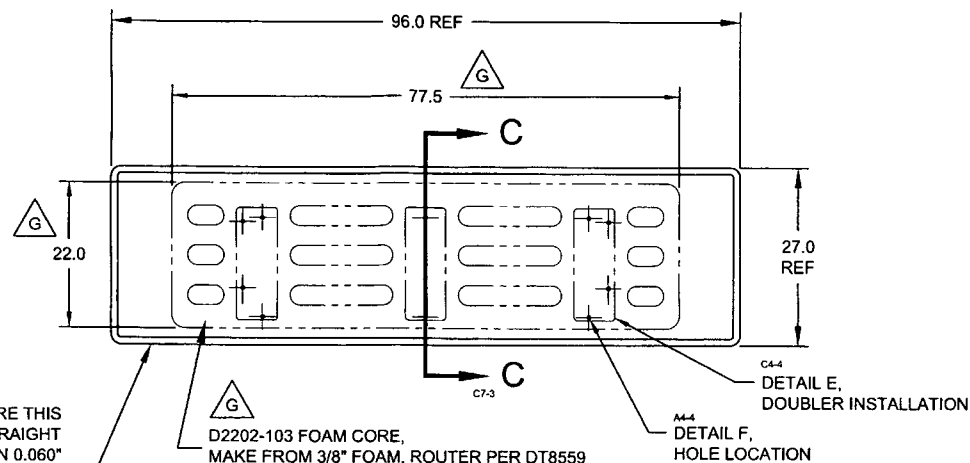
SEE
DETAIL D
B7-3

SECTION C-C C4-3

ENSURE THIS
EDGE IS STRAIGHT
WITHIN 0.060"
AFTER TRIMMING



DETAIL D D7-3
SCALE 10X



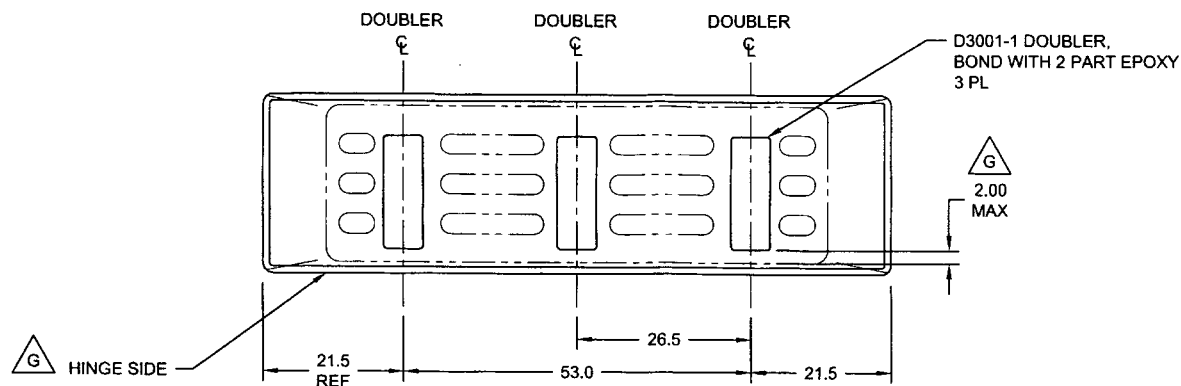
D2202-3 BASE
(MOLD DT8002)

MAIN LAYUP

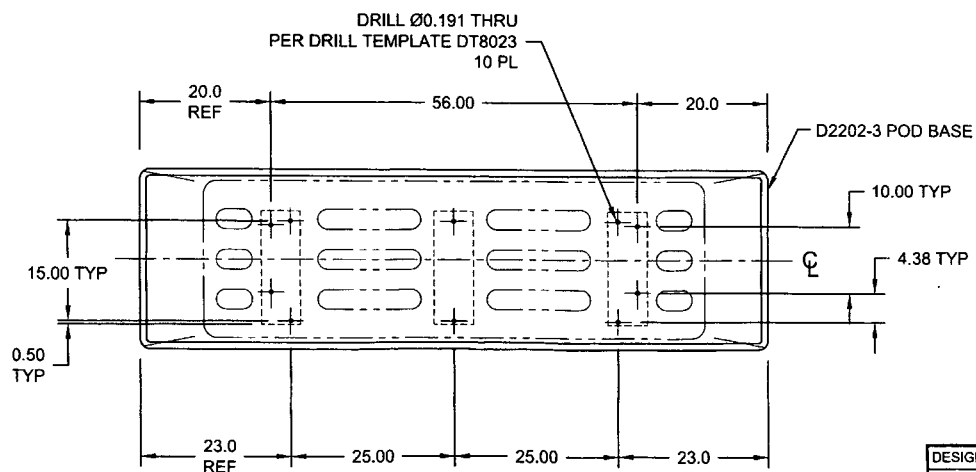
- 9oz SATIN
- 9oz SATIN
- 5oz KEVLAR
- D2202-103 FOAM CORE
- 5oz KEVLAR
- 5oz KEVLAR
- 9oz SATIN

RELEASED
2010-10-28

DESIGN	KE	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	92	DRAWING NO.	REV. G
MFG. APPR.	JM	D2202	SHEET 3 OF 5
APPROVED	10	TITLE	SCALE
DE APPR.	10	UTILITY POD LID AND BASE	NTS
DATE	09.10.06	COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



DETAIL E: INSTALLATION OF D3001-1 DOUBLERS C3-3



DETAIL F: HOLE DRILLING C3-3
(AFTER DOUBLER INSTALLATION)

RELEASED
2010-10-28

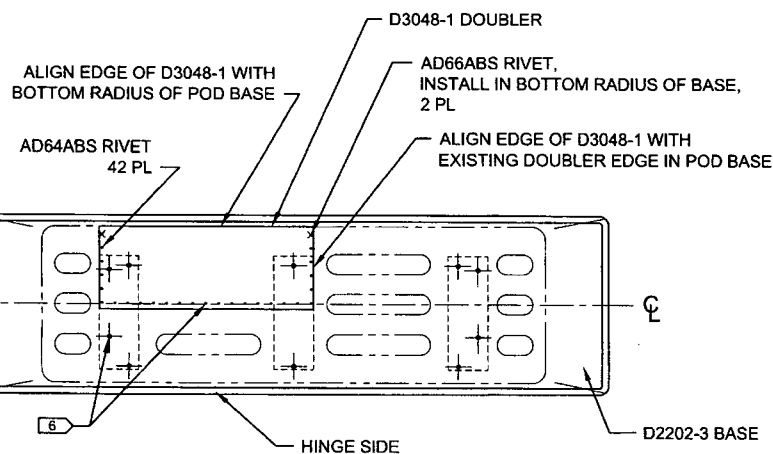
DESIGN	KE	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JP	DRAWING NO.	REV. G
MFG. APPR.	JM	D2202	SHEET 4 OF 5
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	UTILITY POD LID AND BASE	NTS
DATE	09.10.06	COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NOTES : TO MAKE A D2202-5/6 BASE (FOR D350-602-013/-014) FROM A D2202-3 BASE

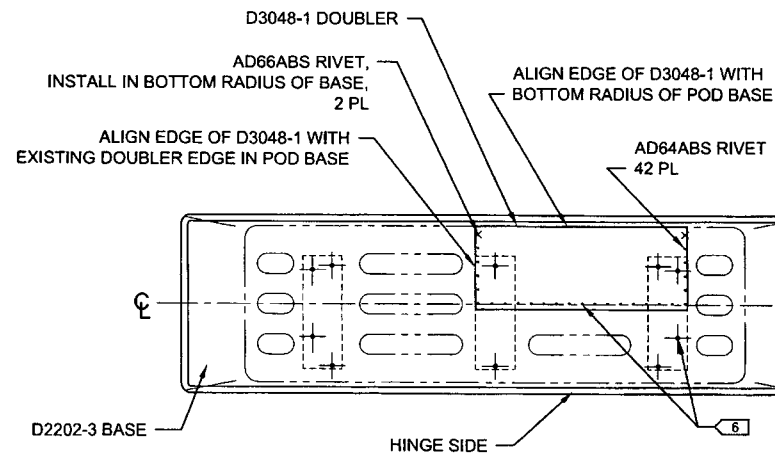
- 1) REMOVE FOAM IN AREA OF POD BASE WHERE D3048-1 DOUBLER WILL BE INSTALLED
- 2) FILL GAPS WITH 9oz SATIN AND RESIN PER DWG (APPROX. 3-4 LAYERS)
- 3) 2 LAYERS OF 9oz SATIN
- 4) BOND D3048-1 DOUBLER IN ORIENTATION SHOWN AND LET CURE
- 5) TRANSFER Ø0.125 HOLES FROM D3048-1 TO POD BASE. INSTALL DOUBLER WITH AD64ABS RIVETS (42) AND AD66ABS (2)
- 6) TRANSFER Ø0.191 HOLES FROM POD BASE TO D3048-1. SEAL HOLES WITH CYANOACRYLATE GLUE
- 7) TOUCH UP AFFECTED AREA WITH GREY PRIMER PER DWG
- 8) FILL CENTER OF THE AD RIVETS WITH RTV 732 TO SEAL

PART LIST:

QTY -5	QTY -6	PART NUMBER	DESCRIPTION
X		D2202-5	POD BASE
	X	D2202-6	POD BASE
1	1	D2202-3	BASE
1	1	D3048-1	DOUBLER
42	42	AD64ABS	RIVET
2	2	AD66ABS	RIVET
AR	AR	RTV	SEALANT



D2202-5 BASE: D3048-1 DOUBLER INSTALLATION
(MAKE FROM D2202-3 BASE)



D2202-6 BASE: D3048-1 DOUBLER INSTALLATION
(MAKE FROM D2202-3 BASE)

DESIGN	KE	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA.	
CHECKED	JP	DRAWING NO.	REV. G
MFG. APPR.	JM	D2202	SHEET 5 OF 5
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	UTILITY POD LID AND BASE	NTS
DATE	09.10.06	COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-602 REV E (OR EARLIER REV.)
AND INSTRUCTIONS FOR CONTINUOUS AIRWORTHINESS ICA-D350-602 REV. 0

REF. TCCA STC: SH93-97

REF. FAA STC: SR01144NY

REF. EASA STC: EASA.IM.R.S.01290

PURPOSE

Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 have new attachment lugs.

CHANGE

The D2230-1/-3 clamps are replaced with wider D4091-1/D3910-3 lugs. The abrasion strip is replaced with D3984-030 rubber extrusion. The D2462-1700 Neoprene Seal is replaced with D2461-1700 Neoprene 'D' Seal. The modified parts list for Installation Instruction D350-602 and Instructions for Continued Airworthiness ICA-D350-602 is shown on sheet 2 of this service instruction. Install the lugs as shown in Figure 1 & 2 of this service instruction. The pod should otherwise be installed per D350-602 and maintained per ICA-D350-602.

The weight and balance for Dart Heli-Utility-Pods D350-602-011 @ CHG 006 and D350-602-013/-014 @ CHG 002 (or later) are updated as follows:

5.0 WEIGHT AND BALANCE (D350-602 Rev. E)

25.6 WEIGHT AND BALANCE (ICA-D350-602 Rev. 0)

The following weight and balance information is for the Dart *Heli-Utility-Pod™*. The weight and balance of any parts that are removed from the aircraft to perform this installation or equipment installed/stowed in the pods are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-602-011 @ CHG 006	61.2 lb	±51.0 in	±3121 in-lb	135 in	8262 in-lb
Heli-Utility-Pod™ LH or RH	27.8 kg	±1.29 m	±35.9 m-kG	3.43 m	95.4 m-kG
D350-602-013 @ CHG 002	61.2 lb	-51.0 in	-3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ LH	27.8 kg	-1.29 m	-35.9 m-kG	3.43 m	79.2 m-kG
D350-602-014 @ CHG 002	61.2 lb	+51.0 in	+3121 in-lb	135 in	6872 in-lb
Heli-Utility-Pod™ RH	27.8 kg	+1.29 m	+35.9 m-kG	3.43 m	79.2 m-kG

LUG UPGRADE KIT

The Dart DSI-9515-011 kit is available to upgrade D350-602-XXX Heli-Utility-Pods made to earlier change numbers with D4091-1 / D3910-3 lugs. The lugs should be installed per Figure 1 & 2 of this service instruction.

QTY -011	Part Number	Description
X	DSI-9515-011	LUG UPGRADE KIT
4	D4091-1	LUG
4	D3910-3	LUG
8	D3984-030	RUBBER EXTRUSION
16	AN4-14A	BOLT
32	AN960JD416	WASHER (OR NAS1149DO463J)
16	MS21042L4	NUT (OR MS21042-4)

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B	NAS1149DO463J WAS xDN432J & CHG QTY	CP	10.04.23
A	NEW ISSUE	CP	10.03.30
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MFG. APPR.	N/A	DSI 9515	SHEET 1 OF 4
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6.0 PART LIST (D350-602 Rev. E)
25.7 PARTS LIST (ICA-D350-602 Rev. 0)

Qty D350-602 -011	Qty D350-602 -013	Qty D350-602 -014	Qty DSI9052 -013	Part Number	Description
X				D350-602-011	HELI-UTILITY-POD™ (FITS BOTH LH/ RH)
	X			D350-602-013	HELI-UTILITY-POD™, LH
		X		D350-602-014	HELI-UTILITY-POD™, RH
			X	DSI9052-013	QUICK RELEASE KIT
1				D2694	POD ASSEMBLY (LH OR RH)
	1			D3322-041	POD ASSEMBLY (LH)
		1		D3322-042	POD ASSEMBLY (RH)
1	1	1		*D2202-1	POD LID
1				*D2202-3	POD BASE
	1	1		*D2202-5	POD BASE
5	5	5		*D2204-9	LATCH
1	1	1		*D2429-041	SPRING CLIP ASSEMBLY
1	1	1		*D2461-1700	NEOPRENE 'D' SEAL
5	5	5		*D2528-1	BACKER PLATE
4	4	4		*D2528-3	BACKER PLATE
1	1	1		*D2569	HINGE
1	1	1		*D3007-041	PROP ASSEMBLY
1	1	1		** D2012-107	CLEVIS
2	2	2		** D2022-101	SPACER
1	1	1		** D2705	SUPPORT BRACKET
1	1	1		** D3007-1	STRUT
1	1	1		** D3015-3	LOCKNUT
1	1	1		** AN4-10A	BOLT
1	1	1		** AN960JD416	WASHER
1	1	1		** MS21042L4	NUT (OR MS21042-4)
1	1	1		** SL69-BS	BALL STUD
1	1	1		** AN960JD516	WASHER
19	19	19		AN4-5A	BOLT
1	1	1		AN4-6A	BOLT
2	2	2		AN526C632R7	SCREW
21	21	21		AN960JD416	WASHER
2	2	2		AN960JD6	WASHER
2	2	2		MS21042L06	NUT (OR MS21042-06)
20	20	20		MS21042L4	NUT (OR MS21042-4)
4	4	4		D4091-1	LUG
4	4	4		D3910-3	LUG
1	1	1		D2258-160	LABEL
1	1	1		D2324-1	STRUT ASSEMBLY
2	2	2		D2523	MOUNTING BRACKET
2	2	2		D2524	SIDE PLATE
1	1	1		D3495-1	PLACARD
8	8	8		D3984-030	RUBBER EXTRUSION
4	4	4		AN3-7A	BOLT
8	8	8		AN3-15A	BOLT
1	1	1		AN4-12A	BOLT
16	16	16		AN4-14A	BOLT
4	4	4		AN4-16A	BOLT
24	24	24		AN960JD10	WASHER
42	42	42		AN960JD416	WASHER
12	12	12		MS21042L3	NUT (OR MS21042-3)
21	21	21		MS21042L4	NUT (OR MS21042-4)
			1	BLRS-010	QUICK RELEASE PIN (1" GRIP)
			3	BLRS-020	QUICK RELEASE PIN (1.5" GRIP)

* INCLUDED IN D2694 OR D3322-041/-042 POD ASSEMBLIES LISTED ABOVE

** INCLUDED IN D3007-041 PROP ASSEMBLY LISTED ABOVE

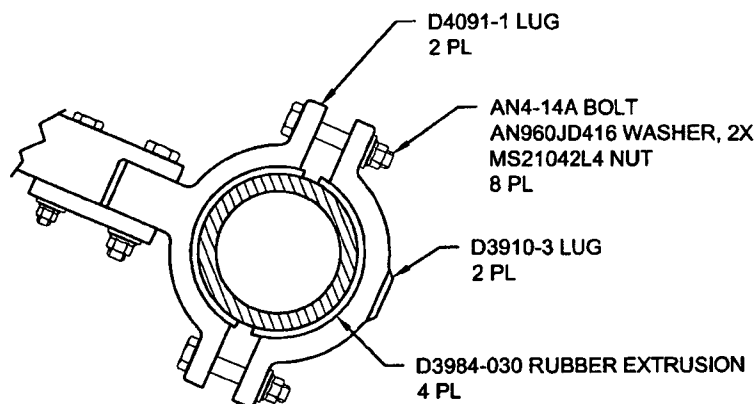
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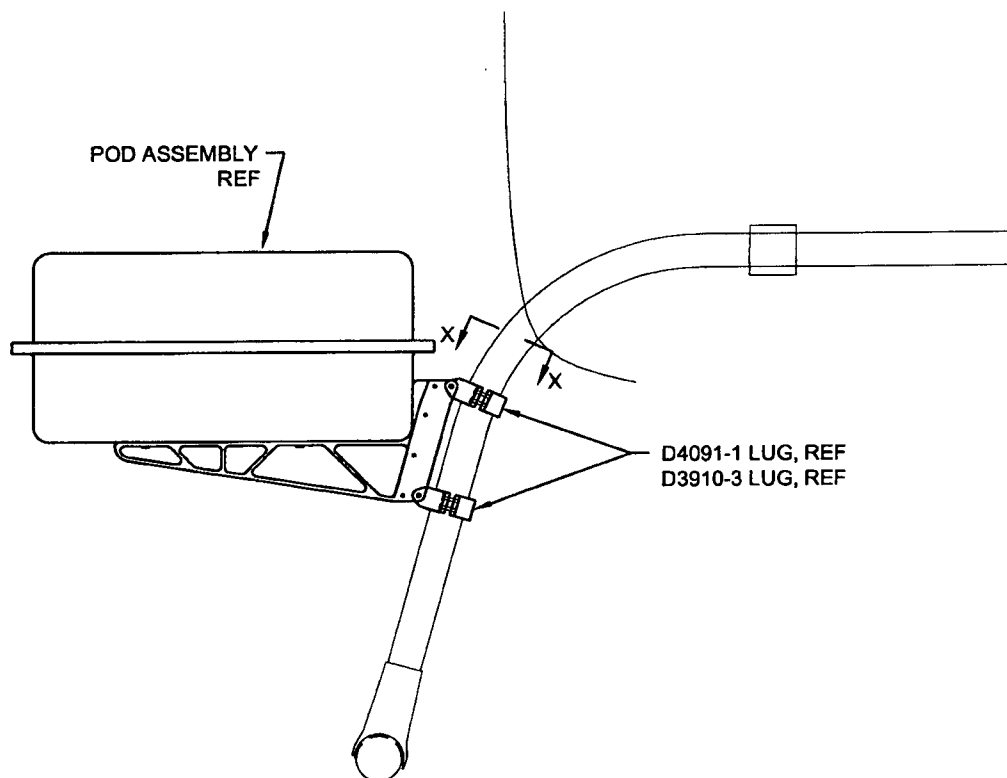


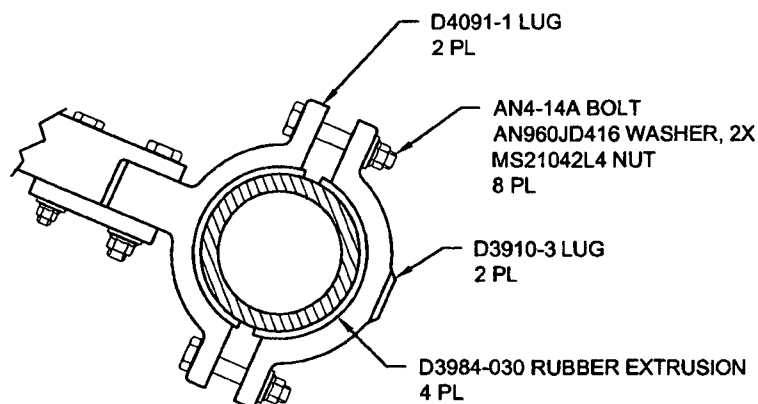
FIGURE 1: Aft Crosstube Attachment
(Installation of D4091-1 / D3910-3 Lugs)

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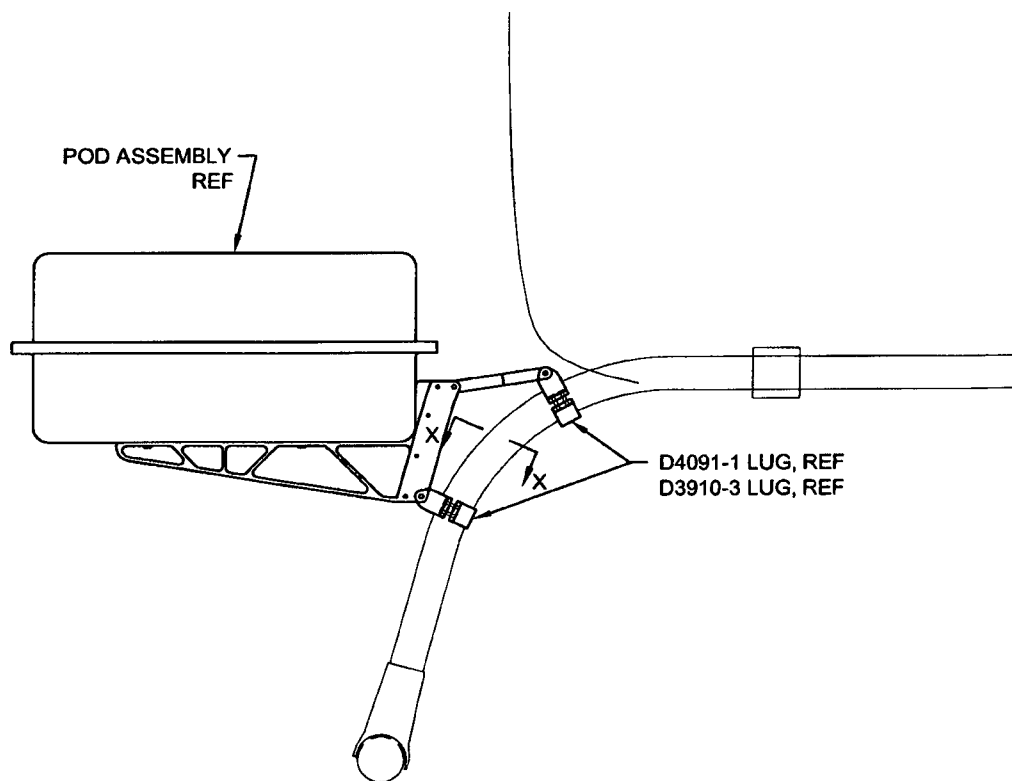


FIGURE 2: Fwd Crosstube Attachment
(Installation of D4091-1 / D3910-3 Lugs)

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Work Order ID 132218

132218

Page 1

Monday, May 04, 2015 8:02:21 AM

Item ID: D350-602-013

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Utility-Pod™ LH

Start Date: 7/17/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/17/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: CL Date: MAR 04 2015

Tooling:

Date:

Stop *NR2*

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2202	G								
D2694	I								
DSI 9515	B								

MAY 24 2016

MW MAY 24 2016

100

Document Control

DOCUMENT CONTROL

100

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D350-602-013

CHC002

140

0.00

140

Small Fab

Small Fab

Memo

0.00

Small Fab

1-Assemble as per Dwg D2694

2-Install label D2258-160 on Pod Assembly as per Dwg D2694 at location of max pod load label on pg2 of dwg

REFERENCE ONLY

6.0 PART LIST (D350-602 Rev. E) 25.7 PARTS LIST (ICA-D350-602 Rev. 0)

Qty D350-602 -011	Qty D350-602 -013	Qty D350-602 -014	Qty DSI9052 -013	Part Number	Description
X				D350-602-011	HELI-UTILITY-POD™ (FITS BOTH LH/ RH)
	X			D350-602-013	HELI-UTILITY-POD™, LH
		X		D350-602-014	HELI-UTILITY-POD™, RH
			X	DSI9052-013	QUICK RELEASE KIT
1				D2694	POD ASSEMBLY (LH OR RH)
	1			D3322-041	POD ASSEMBLY (LH)
		1		D3322-042	POD ASSEMBLY (RH)
1	1	1		*D2202-1	POD LID
1				*D2202-3	POD BASE
	1	1		*D2202-5	POD BASE
5	5	5		*D2204-9	LATCH
1	1	1		*D2429-041	SPRING CLIP ASSEMBLY
1	1	1		*D2461-1700	NEOPRENE 'D' SEAL
5	5	5		*D2528-1	BACKER PLATE
4	4	4		*D2528-3	BACKER PLATE
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1	1	1		*D3007-041	PROP ASSEMBLY
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1	1	1		** D2705	SUPPORT BRACKET
1	1	1		** D3007-1	STRUT
1	1	1		** D3015-3	LOCKNUT
1	1	1		** AN4-10A	BOLT
1	1	1		** AN960JD416	WASHER
1	1	1		** MS21042L4	NUT (OR MS21042-4)
1	1	1		** SL69-BS	BALL STUD
1	1	1		** AN960JD516	WASHER
19	19	19		AN4-5A	BOLT
1	1	1		AN4-6A	BOLT
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2	2	2		MS21042L06	NUT (OR MS21042-06)
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4	4	4		D4091-1	LUG
4	4	4		D3910-3	LUG
1	1	1		D2258-160	LABEL
1	1	1		D2324-1	STRUT ASSEMBLY
2	2	2		D2523-1	MOUNTING BRACKET
2	2	2		D2524-1	SIDE PLATE
1	1	1		D3495-1	PLACARD
8	8	8		D3984-030	RUBBER EXTRUSION
4	4	4		AN3-7A	BOLT
8	8	8		AN3-15A	BOLT
1	1	1		AN4-12A	BOLT
16	16	16		AN4-14A	BOLT
4	4	4		AN4-16A	BOLT
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21	21	21		MS21042L4	NUT (OR MS21042-4)
			1	BLRS-010	QUICK RELEASE PIN (1" GRIP)
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